

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,960	12/31/2003	Nicole L. Blankenbeckler	HT3980 US NA	8572
23906	7590 01/11/2006		EXAMINER	
E I DU PONT DE NEMOURS AND COMPANY			MATZEK, MATTHEW D	
	'ENT RECORDS CENTE ILL PLAZA 25/1128	ER	ART UNIT	PAPER NUMBER
4417 LANCASTER PIKE			1771	
WILMINGTON, DE 19805			DATE MAILED: 01/11/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/749,960	BLANKENBECKLER ET AL.				
Office Action Summary	Examiner	Art Unit				
	Matthew D. Matzek	1771				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address						
Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING D/ Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  If NO period for reply is specified above, the maximum statutory period v Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be timused and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 18 O	<u>ctober 2005</u> .					
2a)⊠ This action is <b>FINAL</b> . 2b)☐ This	This action is FINAL. 2b) This action is non-final.					
• =	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>1-5,7-13,15,16,18 and 19</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-5,7-13,15,16,18 and 19</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/o	r election requirement.					
Application Papers						
9) The specification is objected to by the Examine	г.					
10)⊠ The drawing(s) filed on <u>31 December 2003</u> is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11)☐ The oath or declaration is objected to by the Ex	caminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) ☐ All b) ☐ Some * c) ☐ None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.						
See the attached detailed Office action for a list	or the defined doples not receive					
Attachment(s)		(070.440)				
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail D					
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date		Patent Application (PTO-152)				

Art Unit: 1771

### Response to Amendment

1. The amendment dated 10/18/2005 has been considered and entered into the Record. Claims 6, 14 and 17 have been canceled and their associated rejections withdrawn. Claims 18 and 19 have been added. Amended claims 1 and 9 as well as new claims 18 and 19 contain no new matter. The previously applied prior art rejections have been withdrawn as they failed to teach a microwavable coating comprising carbon and silicate binder.

#### Response to Arguments

2. Applicant's arguments with respect to claims 1-5, 7-13, 15 and 16 have been considered but are most in view of the new ground(s) of rejection.

#### Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1, 2, 7, 9, 10, 15, 18 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Parks (US 5,565,125). Parks teaches a microwavable susceptor that includes a paper or paperboard substrate 21 (Abstract) and food contact layer 22, which Examiner equates to Applicant's nonwoven layer, an intermediate layer of sodium silicate 23, and a microwave interactive layer 24 (col. 4, lines 3-5). The interactive layer comprises sodium silicate as binder and graphite (carbon) (col. 4, lines 4-6). The paper layer is necessarily nonwoven, as paper fibers are too small to be woven. The food contact layer is polymeric and designed to withstand the temperatures normally reached by the microwave susceptor material when exposed to microwave energy (col. 3, lines 36-50). Claims 7 and 15 are rejected as layer 24 comprising sodium silicate and graphite is continuous.

Art Unit: 1771

## Claim Rejections - 35 USC § 103

4. Claims 8 and 16 are rejected under U.S.C. 103 (a) as being unpatentable over Parks (US 5,565,125) as applied to claims 1 and 9 above in further view of Tighe et al. (US 4,959,516).

The invention of Parks teaches an interactive layer comprising sodium silicate and graphite (carbon), but is silent as to the use of a discontinuous layer.

- a. Tighe et al. teach a medium formed by a susceptor, polymeric binder and conductive particles, coated or printed on a substrate to convert electromagnetic radiation to heat for cooking food (Abstract). The susceptor coating of the invention can be printed or coated onto a substrate with patterned (discontinuous) or thickness gradient so that any desired regions of the coating can have a predetermined thickness (col. 6, lines 63-66).
- b. Since Parks and Tighe et al. are from the same field of endeavor (i.e. radiation susceptor material), the purpose disclosed by Tighe et al. would have been recognized in the pertinent art of Parks.
- c. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the susceptor coating of Parks to be discontinuous. The skilled artisan would have been motivated by the desire to provide the article with regions of susceptor having greater coating thickness thereby receiving more heating allowing heat distribution for large objects (col. 6, line 63-col. 7, line 3).
- 5. Claims 3-5 and 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parks (US 5,565,125) "'125" as applied to claims 1, 2 and 9 above in view of Fisher et al. (US 4,892,782) "'782".

Art Unit: 1771

a. Parks teaches a microwavable susceptor that includes a paper or paperboard substrate 21 (Abstract) and food contact layer 22, which Examiner equates to Applicant's nonwoven layer, an intermediate layer of sodium silicate 23, and a microwave interactive layer 24 (col. 4, lines 3-5). The interactive layer comprises sodium silicate as binder and graphite (carbon) (col. 4, lines 4-6). The paper layer is necessarily nonwoven, as paper fibers are too small to be woven. The food contact layer is polymeric and designed to withstand the temperatures normally reached by the microwave susceptor material when exposed to microwave energy (col. 3, lines 36-50).

- b. Fisher et al. teach a fibrous microwave susceptor packaging material comprising nonwoven fibers coated with susceptor materials (Abstract). The substrates may be made of aramid fibers, KEVLAR ® aramid fibers or spunlaced fabric (line 3, col. 20-30). The Examiner takes the position that para-aramid is the equivalent of either aramid and/or KEVLAR ® aramid fibers and as such the limitation set forth in claim 4 is met by the prior art.
- c. Since Parks and Fisher et al. are from the same field of endeavor (i.e. microwave susceptor articles), the purpose disclosed by Parks would have been recognized in the pertinent art of Parks.
- d. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to have made the nonwoven base layer of Parks with a spunlaced sheet of aramid fibers. The skilled artisan would have been motivated by the desire to impart the nonwoven layer with the superior structural properties afforded by the spunlaced aramid in comparison to a nonwoven layer of paper.

Art Unit: 1771

#### Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew D. Matzek whose telephone number is (571) 272-2423.

The examiner can normally be reached on 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1771

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mdm

MAM

TERREL MORRIS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700